

2021 Ford Truck F 150 4WD V6-3.5L Turbo
Vehicle > Technical Service Bulletins

POOR A/C PERFORMANCE AND/OR ENGINE COOLING FANS RUNNING CONTINUOUSLY

TECHNICAL SERVICE BULLETIN
Poor A/C Performance And/Or Engine Cooling
Fans Running Continuously

22-2089
09 March 2022

Model:

Ford
2015-2022 F-150
2017-2022 F-Super Duty
2018-2022 Expedition
Lincoln
2018-2022 Navigator

Summary

This article supersedes TSB 21-2404 to update the part list and vehicle model years affected.

Issue: Some 2015-2022 F-150, 2017-2022 Super Duty and 2018-2022 Expedition/Navigator vehicles may exhibit poor air conditioning (A/C) performance, loss of airflow and/or engine cooling fans running continuously from high A/C pressures. This concern may be from the evaporator freezing up due to the evaporator temperature sensor being biased. To correct the condition, follow the Service Procedure steps to replace the evaporator temperature sensor.

Action: Follow the Service Procedure steps to correct the condition on vehicles that meet all of the following criteria:

- One of the following vehicles:
 - 2015-2022 F-150
 - 2017-2022 F-Super Duty
 - 2018-2022 Expedition/Navigator
- Poor A/C performance
- Engine cooling fans running continuously

Parts

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
ML3Z-19860-A	1	Evaporator Assembly (2015-2019 F-150 With 6R80, 2017-2022 F-Super Duty With 6R140 With R-134A Refrigerant)	1	1
ML3Z-19860-B	1	Evaporator Assembly (2017-2020 F-150 With 6R80 And R-1234YF Refrigerant)	1	1
ML3Z-19860-E	1	Evaporator Assembly (2017-2022 F-150 With 10R80, 2020-2022 F-Super Duty With 10R140, 2017-2022 Expedition and Navigator)	1	1
W714409-S439	1	Steering Shaft Bolt	4	1
W717731-S451	2	Seat Bolt	4	8
HL3Z-19B596-A	1	A/C TXV O-ring Kit	8	2

VC-13-G	As Needed	Motorcraft® Yellow Concentrated Antifreeze/Coolant (All Markets Except Canada)		
CVC-13-G	As Needed	Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)		

Quantity refers to the amount of the service part number required to repair the vehicle.

Unit of Issue refers to the number of individual pieces included in a service part number package.

Piece Quantity refers to the total number of individual pieces required to repair the vehicle.

As Needed indicates the amount of the part may vary and/or is not a whole number. Parts can be billed out as non-whole numbers, including less than 1.

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time
2015-2022 F-150 40/40 Seat: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089A	4.8 Hrs.
2015-2022 F-150 40/20/40 Seat: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089B	4.8 Hrs.
2015-2022 F-150 Console: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089C	5.0 Hrs.
2015-2022 F-150 Floor Shift: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089D	5.6 Hrs.
2017-2022 F-Super Duty 40/20/40: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089E	4.9 Hrs.
2017-2022 F-Super Duty Console: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089F	5.1 Hrs.
2017-2022 F-Super Duty 6.7L 40/20/40 Seat: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089G	4.7 Hrs.
2017-2022 F-Super Duty 6.7L Console: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089H	4.9 Hrs.
2018-2022 Expedition: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089J	4.8 Hrs.
2018-2022 Navigator: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089K	5.2 Hrs.
2018-2022 Navigator Equipped With HUD: Diagnose And Replace The Evaporator Assembly (Do Not Use With Any Other Labor Operations)	222089L	6.0 Hrs.

Repair/Claim Coding

Causal Part:	19860
Condition Code:	42

Service Procedure

1. Run the A/C on maximum/recirculation and blower speed on high for at least 10 minutes with the engine idling, then drive the vehicle.
2. Using the datalogger on the appropriate Ford diagnostic scan tool, pull up the EVAP_TEMP PID in the front controls interface module (FCIM) to read the evaporator temperature and use a thermometer to measure the vent outlet temperature. Compare the temperature reading of the EVAP_TEMP PID to the thermometer's vent outlet temperature reading during A/C use.
3. Is the temperature reading shown on the vent outlet thermometer colder than the temperature reading of the EVAP_TEMP PID?
 - (1). Yes - proceed to Step 4.
 - (2). No - if Step 4 directed to restart this article, the repair is complete. For all others, this article does not apply. Refer to the WSM for normal diagnostics.
4. Recover the refrigerant and review recovered refrigerant amount. Was the correct amount recovered within +/- 1 oz. (0.03 kg.)?
 - (1). Yes - replace the evaporator assembly. Refer to WSM, Section 412-00. The evaporator temperature sensor is part of the evaporator assembly.
 - (2). No - refer to the WSM for normal diagnostics. Once the root cause of the incorrect charge has been corrected, restart this article from Step 1 to confirm the customer concern is corrected.

© 2022 Ford Motor Company

All rights reserved.

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.